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Inside Wallops

NASA Developing Computerized Breast Cancer Diagnostic Tool

A NASA-Stanford University team is in the preliminary stages of developing a smart probe that can be used for breast cancer detection and analysis.

The probe is designed to 'see' a lump, determine by its features if it is cancerous and then quickly predict how the disease may progress. Researchers say surgeons may be able to insert the computerized tool's needle-like tip into breast lumps to make instant diagnoses and long-term cancer predictions.

"This device will permit us to make real-time, detailed interpretations of breast tissue at the tip of the needle," said Robert Mah of NASA's Ames Research Center Neuroengineering Laboratory. "The instrument may allow health care providers to make expert, accurate diagnoses as well as to suggest proper, individualized treatment, even in remote areas."

"To enable the instrument to recognize cancer and predict its progress, we use special neural net software that is trained and learns from experience," he said. Scientists can teach the breast

cancer diagnosis device to predict how aggressive the disease may be.

"We hope to use this device not only to detect cancer, but to understand the nature of an individual cancer," said Dr. Stefanie Jeffrey, Assistant Professor of Surgery and Chief of Breast Surgery, Stanford University School of Medicine, Stanford, CA. "This information may help us determine the distinctive features of a malignancy and how the disease may progress; more knowledge about the cancer may guide us to better individualizing treatment."

Jeffrey and Mah are working together to develop the new device. The researchers say that, once the smart probe has been adequately tested in the laboratory, Dr. Jeffrey will begin testing the device on human beings, perhaps by early 1999.

The breast cancer tool is a spin-off from a computerized robotic brain surgery assistant that was previously developed by Mah and neurosurgeon Dr. Russell Andrews.

Inside Wallops.....

Balloon Launches

On Oct. 13, the first of two .08 million cubic foot test balloons, part of the Ultra-Long Duration Balloon (ULDB) Phase 1 Sphere Test, was successfully launched from Ft. Sumner, NM. Steve Raque, Balloon Program Office was the project manager. Total flight time was 2 hours 53 minutes.

The second .08 million cubic foot test balloon in the ULDB Phase I Sphere Test was successfully launched Oct. 15 from Ft. Sumner, NM. Steve Raque, Balloon Program Office also was the project manager for this flight.

Wallops Radio Pagers

A new radio paging system is being installed at Wallops Flight Facility to replace the one now in service. All pager numbers must be programmed into the system controller before the new system is placed into operation. Many of the existing numbers have already been obtained and installed.

Several existing numbers have not been installed. Contact Carl Davis, x1447 in the RF Communications Shop, Building N162 immediately if your pager number has not been installed so your service will not be interrupted when the new system is placed in operation.

Launch Date Set for STS-95 Mission

NASA program managers set Oct. 29 as the official launch date for the STS-95 mission. The Shuttle Discovery is scheduled for a nine-day flight in which the seven astronauts will conduct more than 80 scientific experiments investigating mysteries that span the realm from the inner universe of the human body to studies of our own Sun. The mission marks the return of John Glenn to space, 36 years after his history-making flight aboard Friendship 7 in February 1962, as the first American to orbit the Earth.

Discovery is scheduled for launch on Oct. 29 at 2 p.m. EST from Launch Pad 39B at the opening of a 2 1/2 hour launch window. An on-time launch would result in Discovery landing at the Kennedy Space Center on Saturday, Nov. 7, at 11:50 a.m. EST.

For additional information on the STS-95 mission, visit the Shuttle home page at <http://www.shuttle.nasa.gov>



Digital photos by Rick Huey.

During National Fire Prevention Week, children and staff from Three Bears Day Care and Preschool, Wattsville (above) visited the Wallops Fire Department.

The group was given a tour of the building, shown the fire fighting, hazardous material and emergency medical vehicles and given demonstrations on the use of different equipment used by fire department members.

Joe Colona (left) shows the children his turnout gear and the Scott air pak. The theme for the 1998 Fire Safety Campaign is "Fire Drills: The Great Escape".



Weather Summary

by Jim Buchanan, Meteorologist

The weather during September was very much like that experienced during August. With little rainfall, tropical help was needed to record close to normal rainfall amounts. The remnants of Hurricane Earl dropped 1.98 inches of rain at Wallops on Sept. 3 and 4, with the most falling on the 4th. Total precipitation for September was 3.01 inches. Average for September is 3.36 inches. There were eight days with measurable rainfall recorded, which is one more day than is normal.



Like many recent months, September was very warm. Temperatures averaged three degrees above normal. Daytime highs averaged 81°; normal is 78°. Nighttime lows averaged 65°; normal is 61°. The monthly average was 73°; normal is 69°. A new record high temperature of 90° was recorded on Sept. 27. The old record for that date set in 1970 was 89°. Another new high temperature of 88° was recorded on Sept. 28. The previous high for that date was 85°, recorded in 1973. The highest reading for the month was 91°, recorded on Sept. 7. Nighttime lows averaged over 50° with no new lows being recorded. There were only two nights of low readings in the 40s with neither approaching a new record.

Would you believe snow? November is the first chance for us to get measurable snow. Don't break out the snow shovels just yet. Snowfall during November normally only totals one-tenth of an inch. On average, November is our second driest month. Normally we have an average of eight days of precipitation for an average of 2.89 inches.

It is about time to bring out the sweaters and jackets. During November, we begin to feel the chill of late fall before transitioning into winter. The average high temperature for the month is usually 58°. There have been six times when temperatures of 80° or more were recorded. The average low for the month is 40°. A temperature of 19° degrees has previously been recorded for Nov. 16, 24, and 27.

With the onset of cold weather, do the safe thing now and get furnaces, fireplaces, chimneys and automobile heating systems serviced. The frost will soon be on the pumpkin.



**Wallops Island
5K "Skeeter Run/Walk"
October 24
7:30 a.m.
Starting from AEGIS
Headquarters Building
Info call x7178, x7181**



Children of all ages enjoyed the hayride at the Wallops Octoberfest held Saturday, Oct. 17. A good crowd came out to enjoy the beautiful weather and participate in events throughout the day.

Outreach Program Needs Volunteers

The third Saturday of each month, October through May, the Black History Club will sponsor an Outreach Program and will meet in Building E-2. The program is open to all Wallops civil service and contract employees' children age 5 to 12.

If you are interested, call Dave Smith, x1316. Sponsored by the WEMA/Morale Activities Association

Flu vaccines are available. Call the Health Unit, x1766 for an appointment.

Federal Women's Program Luncheon Nutrition & Stress Management

Spkr: Llewellyn Allison
VA Cooperative Ext. Agent

October 23
11:30 a.m. - 1 p.m.
Wright's Seafood Restaurant
Atlantic, VA

For more information or to make reservations call Lisha Brown, x2373 or Marilyn Ailes, x2082.

Sponsored by:
Aegis Combat Systems Center
Federal Women's Program Committee

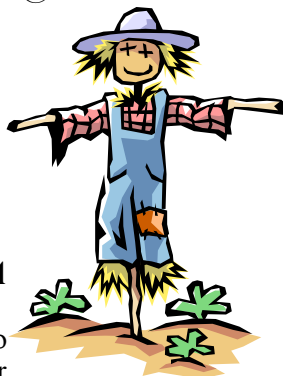
ATTENTION!

It's Fall cleaning time!

WEMA/MAA MONTHLY TAILGATE SALE

Wednesday, October 21
Starts @ 11:30 a.m.

**FLAG
COURT
PARKING
LOT
ACROSS
FROM
THE
CAFETERIA**



Some items to be offered for sale: tuxedo, Aigner raincoat, men's 3/4-length leather coat, books, baby crib, brass candlesticks, winter coats, & more

All civil service, contract and tenant employees are invited to set up and "sell their stuff"! Clean your closet, attic or barn this weekend and GET RID OF THAT STUFF! If you haven't used it or worn it for over a year, THEN SELL IT! (All leave or flex-time policies apply).

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